## V/ESTERN

## ACCREDITATION EVIDENCE

# Math 1400 All Modalities: In Person Syllabus, Online Syllabus, Concurrent Syllabus 

Evidence Type: clear

## Date:

WAN: 22-0232

Classification: syllabus

PII:
No

Course Syllabus
MATH 140001

## COLLEGE ALGEBRA

22IFA

## Contact Information

Chuck Newberg
Office Number: 1410
Email: cnewberg@westernwyoming.edu
Phone: 307-382-1797

## Office Hours

- Monday and Wednesday from 2:30 to 4:00 PM
- Tuesday from 11 AM to 12 noon
- Friday from 8:00 to 9:00 AM
- I am available other times by appointment

On Tuesdays, I will be working in the Math Advancement Center from 1-4.

Response Time: I typically respond to emails and voicemail within 24 to 48 hours unless it is the weekend.

## Course Information

MATH 1400 COLLEGE ALGEBRA
Course Prerequisites: MATH 0934 (C or better) or Math ACT 23 or higher or ALEKS score of

46-60. Students with an ALEKS score of 35-45 may take MATH 1400 and the co-requisite MATH 0931 and not have to take MATH 0934.

Meeting Location and Time: RSC 1225 11:00AM

Description: Emphasizes algebra topics which are important in preparation for the study of calculus, especially functions and their graphs. Topics include polynomial functions, exponential and logarithmic functions and equations, inequalities, and systems of equations. A graphing calculator may be required in some sections. Students with an ALEKS score of 35-45 may take MATH 1400 and the co-requisite MATH 0931

## Method of Instruction:

This is a lecture based course that may require students to utilize the internet in their studies and/or post materials for assessment in the course.

Transferability: Keep this course outline for future transferability issues with other schools. Students planning to attend another school should check with that institution concerning transferability, since transferability is up to the discretion of each institution.

## Required Textbooks and/or Materials:



Algebra and Trigonometry
ISBN: 9781938168376
Authors: Jay P. Abramson, Valeree Falduto, Rachael Gross
(Mathematics teacher), David Lippman, Rick Norwood, Melonie Rasmussen, Nicholas Belloit, Jean-Marie Magnier, Harold Whipple, Christina Fernandez
Publication Date: 2015-02-13
Edition: You can have either a hard copy or an eBook of this. It can be downloaded at openstax.com. A hard copy maybe purchased at the college bookstore..

## Textbook Comments

This course uses an Open Education Resource (OER). A hard copy of it can be purchased/rented at the college bookstore. You may also down load a pdf at Algebra and Trigonometry, 1 ed

## College Wide Goals for Student Success

Western has identified the following as goals for student success:

- Communicate Competently
- Retrieve and Evaluate Information
- See Issues from Multiple Perspectives
- Think Critically, Analyze, and Solve Problems
- Develop Life Skills


## Course Primary Learning Goals and Integration of the Goals for Student Success

Listed below are this course's primary goals and the measure of successful completion of these goals. Some of the course goals also reinforce Western's Goals for Student Success.

| What |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| students will | Program | Interstate | Goals for | How the skills |
| learn in this | Learning <br> class- <br> (Course | Outcomes | Passport |  |
| Outcomes | Student | Success | measured - <br> (Assessment) |  |


| What students will learn in this class(Course Objectives) | Program <br> Learning <br> Outcomes | Interstate <br> Passport <br> Outcomes | Goals for <br> Student <br> Success | How the skills will be measured (Assessment) |
| :---: | :---: | :---: | :---: | :---: |
| Define and analyze functions and their graphs | Demonstrate proficiency in mathematical skills, concepts and logic. <br> Use <br> mathematical <br> methods to solve applied <br> problems and clearly <br> communicate problem <br> solutions or logical explanations. <br> Use <br> appropriate technology to solve math problems and/or to improve conceptual understanding. | Analysis of <br> Quantitative <br> Arguments: <br> select and use <br> appropriate <br> numeric, <br> symbolic, <br> graphical and <br> statistical <br> reasoning to <br> interpret, <br> analyze and critique information or line of reasoning presented by others. | Retrieve and <br> Evaluate Information <br> Think <br> Critically, <br> Analyze, Solve <br> Problems <br> Develop Life Skills | Assessments may include, but are not limited to: <br> - Homework <br> - Quizzes <br> - Exams <br> - Projects |


| What students will learn in this class(Course Objectives) | Program <br> Learning <br> Outcomes | Interstate <br> Passport <br> Outcomes | Goals for <br> Student <br> Success | How the skills will be measured (Assessment) |
| :---: | :---: | :---: | :---: | :---: |
| Solve <br> quadratic equations and graph quadratic functions | Demonstrate proficiency in mathematical skills, concepts and logic. <br> Use <br> mathematical <br> methods to solve applied <br> problems and clearly communicate problem solutions or logical explanations. <br> Use <br> appropriate technology to solve math problems and/or to improve conceptual understanding. | Communication of Quantitative Arguments: express quantitative information symbolically, graphically, and in written or oral language. <br> Mathematical Process: design and follow a multi- step mathematical process through to a logical conclusion and critically evaluate the reasonableness of the result. | Retrieve and Evaluate Information <br> Think Critically, Analyze, Solve Problems Develop Life Skills | Assessments may include, but are not limited to: <br> - Homework <br> - Quizzes <br> - Exams <br> - Projects |


| What students will learn in this class(Course Objectives) | Program <br> Learning <br> Outcomes | Interstate <br> Passport <br> Outcomes | Goals for <br> Student <br> Success | How the skills will be measured (Assessment) |
| :---: | :---: | :---: | :---: | :---: |
| Identify and construct inverse functions and their properties | Demonstrate proficiency in mathematical skills, concepts and logic. <br> Use <br> mathematical <br> methods to solve applied <br> problems and clearly communicate problem solutions or logical explanations. <br> Use appropriate technology to solve math problems and/or to improve conceptual understanding. | Computational Skills: <br> demonstrate proficiency with arithmetic and algebraic computational skills, and extend them, for example, to geometric and statistical computations. | Retrieve and Evaluate Information <br> Think Critically, Analyze, Solve Problems <br> See Issues from Multiple Perspectives | Assessments may include, but are not limited to: <br> - Homework <br> - Quizzes <br> - Exams <br> - Projects |


| What students will learn in this class(Course Objectives) | Program <br> Learning <br> Outcomes | Interstate <br> Passport <br> Outcomes | Goals for <br> Student <br> Success | How the skills will be measured (Assessment) |
| :---: | :---: | :---: | :---: | :---: |
| Define, explain, and apply exponential and logarithmic functions and their properties | Demonstrate proficiency in mathematical skills, concepts and logic. <br> Use mathematical methods to solve applied problems and clearly communicate problem solutions or logical explanations. <br> Use appropriate technology to solve math problems and/or to improve conceptual understanding. | Formulation of <br> Quantitative <br> Arguments: <br> recognize, <br> evaluate, and <br> use quantitative <br> information, <br> quantitative <br> reasoning and <br> technology to <br> support a <br> position or line of reasoning. <br> Quantitative <br> Models: create, <br> analyze and <br> apply <br> appropriate <br> quantitative <br> models to solve <br> quantitative <br> theoretical and <br> real-world <br> problems | Retrieve and Evaluate Information <br> Think Critically, Analyze, Solve Problems <br> See Issues from Multiple Perspectives | Assessments may include, but are not limited to: <br> - Homework <br> - Quizzes <br> - Exams <br> - Projects |

## Course Policies

Late Work: Generally late work is not accepted, please complete homework in a timely fashion.

Attendance Policy: There is no attendance policy in this course.

Extra Credit: There is no extra credit in this course.

## Methods of Evaluation:

Homework

- Homework will be assigned per section of the textbook.
- It is expected that students spend one to two hours on homework per assignment.
- Please do NOT search for the homework answers on the internet or use one of the numerous homework support systems for money. It is a terrible way to prepare for the exams, plus a waste of your money.
- Please rely on your textbook, course website, instructor and your fellow classmates for assistance. Homework due dates will be posted on Canvas.
- You will be required to scan or post pictures of your homework in Canvas.
- Homework must be done neatly, and on plain paper, no lines.
- The lowest five homework grades will be dropped to allow for school approved activities, illnesses, family emergencies, or all valid reasons why an assignment could not be turned in on time.
- Homework will be worth $20 \%$ in the final grade.

Each homework assignment will be given one of three scores, see table for grading rubric

| Description | Points |
| :--- | :--- |
| - College level work (answers with |  |
|  |  |
| supporting work) | 5 (full credit) |
| - Demonstration of mastery of the |  |
|  |  |
| major concepts |  |
| - Hand-written |  |

One or more of the following characterizations exist:

- Sloppy or illegible work
- Incomplete assignment (multiple blank problems)
- Lack of understanding of a major concept
- Missing supporting work to justify the answers.
- Not enough detail (instructor's discretion)

One or more of the following characterizations exist:

- Not submitted for grade
- Significant problems not attempted and completed (instructor's discretion)
- Scan or pictures are not readable


## Quizzes

- Quizzes will be administered once a week (will depend on the timing and flow of the course). The material covered will be similar to homework problems and example problems in class.
- Quizzes will be scored on a basis of 10 points and will count as $15 \%$ in the final grade.
- The lowest two quiz scores will be dropped at the end of the semester.
- Missed quizzes may only be made-up if the absence is due to a school-related event, illness, or emergency. It is the student's responsibility to arrange a make-up time BEFORE leaving for a school event or as soon as possible if the missed quiz is due to illness or an emergency.


## Projects

- Computer technology will be used for students to demonstrate mathematical concepts.
- Projects will require the use of GeoGebra (free) and screencasting software (free).
- Students will be required to create videos using screencasting software and a web camera showing both screen and presenter.
- Four projects will be assigned and will be graded on a basis of 10 points.
- Projects will count $5 \%$ in the final grade.


## Exams

- This course will have three exams during the semester.
- The exams will count for $60 \%$ in the final grade.

Makeup Policy for Exams:
Makeup's are only given for the following two situations (1) School approved activities (field trips, athletic events...) which require prior approval or (2) due to illness or emergencies, in which case either email me or leave a message on my office answering machine (which is always on line) prior to the exam. Instructor has the final say in whether reasons given for missing exams are valid. If you miss an exam without prior notice, your maximum allowable score will drop 10\% each day you delay in taking the makeup exam.

## Grading Policy: College Policy and Procedure Policy 5240A

## Grading Scale:

Final grades will based off of a weighted scale with the exams counting as $60 \%$ of the final grade.

| Item | Weight |
| :--- | :---: |
| Exams (three exams) | $60 \%$ |
| Quizzes | $20 \%$ |
| Homework | $\mathbf{1 5 \%}$ |
| Projects | $5 \%$ |
| Total | $\mathbf{1 0 0 \%}$ |

- $\mathrm{A}=90 \%$ and higher
- $B=80 \%$ and higher
- $\mathrm{C}=70 \%$ and higher
- $D=60 \%$ and higher
- $\mathrm{F}=$ Below 60\%


## Rounding Policy:

Grades will be rounded to the nearest percentage point. $89.5 \%$ rounds to $90 \%$, but an 89.4\% rounds to an 89\%.

## Changes to the Syllabus

The information in this syllabus is subject to change. Students will be notified of any changes.

## Major Units of Study

- Chapter 2: Equations and Inequalities
- Chapter 3: Functions
- Chapter 4: Linear Functions
- Chapter 5: Polynomial and Rational Functions
- Chapter 6: Exponential and Logarithmic Functions
- Chapter 11: Systems of Equations and Inequalities

Not all sections from each chapter will be covered.

## Inclusivity Statement

Western Wyoming Community College is an Equal Opportunity Institution and as such, prohibits discrimination and harassment based on race, color, religion, gender identity, gender expression, veteran status or political belief in admission, employment, access to and treatment in College programs, classes, services and activities.

## Academic Integrity and Plagiarism Policy

According to the Merriam-Webster Online Dictionary, to "plagiarize" means:

- To steal and pass off (the ideas or words of another) as one's own
- To use (another's production) without crediting the source
- To commit literary theft
- To present as new and original an idea or product derived from an existing source

Plagiarism is explicitly not allowed and will result in the student receiving a zero on the assignment. Recurring instances of plagiarism can lead to receiving a final grade of "F" for the course or dismissal. Policy 6220D

## Title IX Duty to Report

Western faculty are committed to supporting students and upholding the College's nondiscrimination policy. Under Title IX, discrimination based upon sex and gender is prohibited. If you experience an incident of sex- or gender-based discrimination, we encourage you to report it. While you may talk to a faculty member, understand that as a "Responsible Employee" of the College, the faculty member MUST report information you share about the incident to the College. If you would like to speak with someone who
may be able to afford you privacy or confidentiality, there are people who can meet with you. Faculty can help direct you or you may find info at the Office of Wellbeing and Accessibility located on Western's Rock Springs Campus room 1227 or call 307-3811652.

## Incomplete Policy

Incomplete Policy_(College Policy and Procedure 5240A) :

The grade of "I" (Incomplete) may be given after the mid-point of a course when unexpected circumstances, such as illness or military service, make it impossible for a student who is passing the course with a "C" or better at the mid-point of the course to complete the remaining work by the end of the semester. The purpose of an Incomplete, therefore, is not to repeat the entire course but to complete no more than $50 \%$ of the work. It is the student's responsibility to initiate this process, but an Incomplete is assigned solely at the instructor's discretion. An Incomplete will automatically revert to an "F" without action by the student during the following semester.

## Calculator Policy:

- A physical, non-graphing scientific calculators are the only acceptable calculators for quizzes and exams.
- A scientific calculator is required for the course.
- The recommended calculator is the TI-30XS MultiView . It is the calculator I will be using in class.

Course Syllabus
MATH 1400 R1

## COLLEGE ALGEBRA

22/FA

## Contact Information



Lyudmila "Lusi" Stephens
Office Number: 1451
Email: Istephens@westernwyoming.edu
Phone: 307-382-1865

## Office Hours

We can meet in-person or Zoom

Monday/Wednesday 9:30 am - 11:00 am (office, 1451)
Thursday 8:00 am - 9:30 am (MAC lab, 1407)
9:30 am - 10:00 am (office, 1451)
or by appointment

Response Time: Students can generally expect a response from the instructor within one business day with the exception of holidays, weekends, or personal leave. Communication received outside of regular business hours (8am-5pm) will be considered as received the following business day.

## Course Information

## MATH 1400 COLLEGE ALGEBRA

Course Prerequisites: MATH 0934 (C or better) or Math ACT 23 or higher or ALEKS score of 46-60. Students with an ALEKS score of 35-45 may take MATH 1400 and the co-requisite MATH 0931 and not have to take MATH 0934.

Meeting Location and Time: ROC

Description: Emphasizes algebra topics which are important in preparation for the study of calculus, especially functions and their graphs. Topics include polynomial functions, exponential and logarithmic functions and equations, inequalities, and systems of equations. A graphing calculator may be required in some sections. Students with an ALEKS score of 35-45 may take MATH 1400 and the co-requisite MATH 0931

Method of Instruction: Instruction will consist of a combination of methods including lecture, video examples, animations, worksheets, individual and group problem solving, and an internet component using MyLab\&Mastering.

Transferability: Keep this course outline for future transferability issues with other schools. Students planning to attend another school should check with that institution concerning transferability, since transferability is up to the discretion of each institution.

## Required Textbooks and/or Materials:

(EBOOK) MYLAB MATH - STANDALONE ACCESS CARD
Subtitle: REQUIRED
ISBN: 9780321922137
Publisher: Pearson
Edition: 5

Precalculus - student will have access to the textbook materials through Pearson's MyLab online account (requires Standalone Access Card, see above) Subtitle: NOT REQUIRED


Authors: Judith A. Beecher, Judith A. Penna, Marvin L. Bittinger

Publisher: Pearson

## Calculator Policy

A scientific calculator, such as TI-30XS is highly recommended. Note, graphing calculators, internet calculators, or cell phone calculators are strictly forbidden while taking Quizzes or Exams.

## Course Policies

Late Work: All due dates are firm, final, and non-negotiable.

Attendance Policy: This course requires regular participation. But this is the students' responsibility. The instructor will assume that the students are mature enough to understand the consequences (such as poor performance on tests) of not participating on a regular basis. While the "attendance" of each individual will not affect her or his grade, no exceptions on homework, quizzes, or exams will be made.

Extra Credit: There will be no extra credit offered in this course. Be prepared to do the necessary assigned work. The grade you earn on the assigned tasks is the grade you will receive.

## Methods of Evaluation:

- Homework
- Homework will be assigned and evaluated regularly through the MyLab\&Mastering.
- Students are required to work on assigned Media questions before answering questions.
- Late homework will be accepted through the end of semester. Problems not submitted on time will have a $50 \%$ deduction from the final score.
- Homework will count as $15 \%$ of the final grade in the course.


## - Quizzes

- Quizzes will be administered once a week (will depend on the timing and flow of the course). The material covered will be similar to homework problems and example problems in class.
- Quizzes will be scored on a basis of 10 points.
- Quizzes will count as $15 \%$ of the final grade in the course.
- Two lowest quiz grades will be dropped at the end.
- In the event of documented medical emergencies or college approved/sponsored activities, the student must contact the instructor as soon as possible if she or he is unable to take the exam, and provide the instructor with the documented proof of the absence. Accommodations will be made for these students only. Otherwise, if quiz is missed, the student will receive a zero percent (0\%) on it. It is the student's responsibility to arrange a make-up time BEFORE leaving for a school event or as soon as possible if the missed quiz is due to illness or an emergency.
- No notes, references, or cell phones are allowed during exams.
- Exams
- Three regular exams (100 points each) and one comprehensive final exam (150 points) will be administered during the semester.
- Exams will count as 70\% of the final grade in the course.
- In the event of documented medical emergencies or school approved/sponsored activities, the student must contact the instructor as soon as possible if she or he is unable to take the exam and provide the instructor with the documented proof of the absence. Accommodations will be made for these students only. Otherwise, if exam is missed, the student will receive a zero percent (0\%) on it. It is the student's responsibility to arrange a make-up time BEFORE leaving for a school event or as soon as possible if the missed exam is due to illness or an emergency.
- If a scheduled makeup exam is missed, earning full credit for the exam may not be possible.
- After exam is handed back to the class you have 24 hours to contest any grading. After that time, no changes will be made.
- No notes, references, or cell phones are allowed during exams.


## Grading Policy: College Policy and Procedure Policy 5240A

| Homework | $15 \%$ |
| :--- | :---: |
| Quizzes | $15 \%$ |
| Exams |  |
|  | TOTAL |
|  | $100 \%$ |

## Grading Scale:

$A=90-100 \%$
B = 80-89\%
C = 70-79\%
D = 60-69\%
$F=0-60 \%$

Rounding Policy: Grades will be rounded to the nearest whole number, i.e. $89.5 \%$ is rounded up to $90 \%$, but $89.4 \%$ is rounded down to $89 \%$.

## Major Units of Study

Ch 1: Graphs, Functions, and Models (1.1-1.4)
Ch 2: More on Functions (2.1-2.5)
Ch 3: Quadratic Functions and Equations; Inequalities (3.1-3.3)

Ch 4: Polynomial Functions and Rational Functions (4.1, 4.2, 4.5)
Ch 5: Exponential Functions and Logarithmic Functions (5.1-5.6)
Ch 9: Systems of Equations (9.1)

## College Wide Goals for Student Success

Western has identified the following as goals for student success:

- Communicate Competently
- Retrieve and Evaluate Information
- See Issues from Multiple Perspectives
- Think Critically, Analyze, and Solve Problems
- Develop Life Skills


## Course Primary Learning Goals and Integration of the Goals for Student Success

Listed below are this course's primary goals and the measure of successful completion of these goals. Some of the course goals also reinforce Western's Goals for Student Success.

| What students will learn in this class- <br> (Course Objectives) | Program <br> Learning <br> Outcomes | Interstate <br> Passport <br> Outcomes | Goals for Student Success | How the skills will be measured (Assessment) |
| :---: | :---: | :---: | :---: | :---: |


| What students will learn in this class(Course Objectives) | Program <br> Learning <br> Outcomes | Interstate <br> Passport <br> Outcomes | Goals for <br> Student <br> Success | How the skills will be measured (Assessment) |
| :---: | :---: | :---: | :---: | :---: |
| Define and analyze functions and their graphs | Demonstrate proficiency in mathematical skills, concepts and logic. <br> Use <br> mathematical <br> methods to solve applied <br> problems and clearly <br> communicate problem <br> solutions or logical explanations. <br> Use <br> appropriate technology to solve math problems and/or to improve conceptual understanding. | Analysis of <br> Quantitative <br> Arguments: <br> select and use <br> appropriate <br> numeric, <br> symbolic, <br> graphical and <br> statistical <br> reasoning to <br> interpret, <br> analyze and critique information or line of reasoning presented by others. | Retrieve and <br> Evaluate Information <br> Think <br> Critically, <br> Analyze, Solve <br> Problems <br> Develop Life Skills | Assessments may include, but are not limited to: <br> - Homework <br> - Quizzes <br> - Exams <br> - Projects |


| What students will learn in this class(Course Objectives) | Program <br> Learning <br> Outcomes | Interstate <br> Passport <br> Outcomes | Goals for <br> Student <br> Success | How the skills will be measured (Assessment) |
| :---: | :---: | :---: | :---: | :---: |
| Solve <br> quadratic equations and graph quadratic functions | Demonstrate proficiency in mathematical skills, concepts and logic. <br> Use <br> mathematical <br> methods to solve applied <br> problems and clearly communicate problem solutions or logical explanations. <br> Use <br> appropriate technology to solve math problems and/or to improve conceptual understanding. | Communication of Quantitative Arguments: express quantitative information symbolically, graphically, and in written or oral language. <br> Mathematical Process: design and follow a multi- step mathematical process through to a logical conclusion and critically evaluate the reasonableness of the result. | Retrieve and Evaluate Information <br> Think Critically, Analyze, Solve Problems Develop Life Skills | Assessments may include, but are not limited to: <br> - Homework <br> - Quizzes <br> - Exams <br> - Projects |


| What students will learn in this class(Course Objectives) | Program <br> Learning <br> Outcomes | Interstate <br> Passport <br> Outcomes | Goals for <br> Student <br> Success | How the skills will be measured (Assessment) |
| :---: | :---: | :---: | :---: | :---: |
| Identify and construct inverse functions and their properties | Demonstrate proficiency in mathematical skills, concepts and logic. <br> Use <br> mathematical <br> methods to solve applied <br> problems and clearly communicate problem solutions or logical explanations. <br> Use appropriate technology to solve math problems and/or to improve conceptual understanding. | Computational Skills: <br> demonstrate proficiency with arithmetic and algebraic computational skills, and extend them, for example, to geometric and statistical computations. | Retrieve and Evaluate Information <br> Think Critically, Analyze, Solve Problems <br> See Issues from Multiple Perspectives | Assessments may include, but are not limited to: <br> - Homework <br> - Quizzes <br> - Exams <br> - Projects |


| What students will learn in this class(Course Objectives) | Program <br> Learning <br> Outcomes | Interstate <br> Passport <br> Outcomes | Goals for <br> Student <br> Success | How the skills will be measured (Assessment) |
| :---: | :---: | :---: | :---: | :---: |
| Define, explain, and apply exponential and logarithmic functions and their properties | Demonstrate proficiency in mathematical skills, concepts and logic. <br> Use mathematical methods to solve applied problems and clearly communicate problem solutions or logical explanations. <br> Use appropriate technology to solve math problems and/or to improve conceptual understanding. | Formulation of Quantitative Arguments: recognize, evaluate, and use quantitative information, quantitative reasoning and technology to support a position or line of reasoning. <br> Quantitative Models: create, analyze and apply appropriate quantitative models to solve quantitative theoretical and real-world problems | Retrieve and <br> Evaluate <br> Information <br> Think <br> Critically, <br> Analyze, Solve <br> Problems <br> See Issues <br> from Multiple <br> Perspectives | Assessments may include, but are not limited to: <br> - Homework <br> - Quizzes <br> - Exams <br> - Projects |

## Changes to the Syllabus

The information in this syllabus is subject to change. Students will be notified of any changes.

## Inclusivity Statement

Western Wyoming Community College is an Equal Opportunity Institution and as such, prohibits discrimination and harassment based on race, color, religion, gender identity, gender expression, veteran status or political belief in admission, employment, access to and treatment in College programs, classes, services and activities.

## Academic Integrity and Plagiarism Policy

According to the Merriam-Webster Online Dictionary, to "plagiarize" means:

- To steal and pass off (the ideas or words of another) as one's own
- To use (another's production) without crediting the source
- To commit literary theft
- To present as new and original an idea or product derived from an existing source

Plagiarism is explicitly not allowed and will result in the student receiving a zero on the assignment. Recurring instances of plagiarism can lead to receiving a final grade of "F" for the course or dismissal. Policy 6220D

## Title IX Duty to Report

Western faculty are committed to supporting students and upholding the College's nondiscrimination policy. Under Title IX, discrimination based upon sex and gender is prohibited. If you experience an incident of sex- or gender-based discrimination, we encourage you to report it. While you may talk to a faculty member, understand that as a "Responsible Employee" of the College, the faculty member MUST report information you share about the incident to the College. If you would like to speak with someone who may be able to afford you privacy or confidentiality, there are people who can meet with you. Faculty can help direct you or you may find info at the Office of Wellbeing and Accessibility located on Western's Rock Springs Campus room 1227 or call 307-3811652.

## Incomplete Policy

Incomplete Policy_(College Policy and Procedure 5240A) :

The grade of "I" (Incomplete) may be given after the mid-point of a course when unexpected circumstances, such as illness or military service, make it impossible for a student who is passing the course with a "C" or better at the mid-point of the course to complete the remaining work by the end of the semester. The purpose of an Incomplete, therefore, is not to repeat the entire course but to complete no more than $50 \%$ of the work. It is the student's responsibility to initiate this process, but an Incomplete is assigned solely at the instructor's discretion. An Incomplete will automatically revert to an " $F$ " without action by the student during the following semester.

Course Syllabus
MATH 1400 NT3

## COLLEGE ALGEBRA

22IFA

## Contact Information

Kaylee Tuttle
Office Number: RS 1459
Email: ktuttle@westernwyoming.edu
Phone: 307-382-1765

## Office Hours

Tuesdays: 2:30pm-4:00pm in office
Wednesdays: 2:00pm-3:30pm in MAC
Thursdays: 10:30am-12:30pm in office
Response Time: I should respond within the day unless it is the weekend.

## Course Information

## MATH 1400 COLLEGE ALGEBRA

Course Prerequisites: MATH 0934 (C or better) or Math ACT 23 or higher or ALEKS score of 46-60. Students with an ALEKS score of 35-45 may take MATH 1400 and the co-requisite MATH 0931 and not have to take MATH 0934.
Meeting Location and Time: NET

Description: Emphasizes algebra topics which are important in preparation for the study of
calculus, especially functions and their graphs. Topics include polynomial functions, exponential and logarithmic functions and equations, inequalities, and systems of equations. A graphing calculator may be required in some sections. Students with an ALEKS score of 35-45 may take MATH 1400 and the co-requisite MATH 0931

Method of Instruction: My instruction will consist of several different methods that include but are not limited to lecture, worksheets, online videos, group work, individual problem solving, and an internet component using MyMathLab.

Transferability: Keep this course outline for future transferability issues with other schools. Students planning to attend another school should check with that institution concerning transferability, since transferability is up to the discretion of each institution.

## Required Textbooks and/or Materials:



Precalculus
ISBN: 9780321969552
Authors: Judith A. Beecher, Judith A. Penna, Marvin L.
Bittinger
Publisher: Pearson College Division
Publication Date: 2015-01-07


OR Mymathlab -- Standalone Access Card ISBN: 9780321199911
Authors: - O Pearson Education, Pearson Education, Inc., Hall
H Pearson Education, David P Pearson Education, Willoughby H Pearson Education, - S Pearson Education, Pearson, Mike Pearson Education
Publisher: Pearson
Publication Date: 2003-07-08

## College Wide Goals for Student Success

Western has identified the following as goals for student success:

- Communicate Competently
- Retrieve and Evaluate Information
- See Issues from Multiple Perspectives
- Think Critically, Analyze, and Solve Problems
- Develop Life Skills


## Course Primary Learning Goals and Integration of the Goals for Student Success

Listed below are this course's primary goals and the measure of successful completion of these goals. Some of the course goals also reinforce Western's Goals for Student Success.

| What |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| students will | Program | Interstate | Goals for | How the skills |
| learn in this | Learning <br> class- <br> (Course | Passport <br> Outcomes | Outcomes | Student |
| Success | measured - <br> (Assessment) |  |  |  |
| Objectives) |  |  |  |  |


| What students will learn in this class(Course Objectives) | Program <br> Learning <br> Outcomes | Interstate <br> Passport <br> Outcomes | Goals for <br> Student <br> Success | How the skills will be measured (Assessment) |
| :---: | :---: | :---: | :---: | :---: |
| Define and analyze functions and their graphs | Demonstrate proficiency in mathematical skills, concepts and logic. <br> Use <br> mathematical <br> methods to solve applied <br> problems and clearly <br> communicate problem <br> solutions or logical explanations. <br> Use <br> appropriate <br> technology to <br> solve math <br> problems <br> and/or to <br> improve <br> conceptual <br> understanding. | Analysis of <br> Quantitative <br> Arguments: <br> select and use <br> appropriate <br> numeric, <br> symbolic, <br> graphical and <br> statistical <br> reasoning to <br> interpret, <br> analyze and critique <br> information or <br> line of reasoning presented by others. | Retrieve and Evaluate Information <br> Think Critically, Analyze, Solve Problems Develop Life Skills | Assessments may include, but are not limited to: <br> - Homework <br> - Quizzes <br> - Exams <br> - Projects |


| What students will learn in this class(Course Objectives) | Program <br> Learning <br> Outcomes | Interstate <br> Passport <br> Outcomes | Goals for <br> Student <br> Success | How the skills will be measured (Assessment) |
| :---: | :---: | :---: | :---: | :---: |
| Solve <br> quadratic equations and graph quadratic functions | Demonstrate proficiency in mathematical skills, concepts and logic. <br> Use <br> mathematical <br> methods to solve applied <br> problems and clearly <br> communicate problem <br> solutions or logical explanations. <br> Use appropriate technology to solve math problems and/or to improve conceptual understanding. | Communication <br> of Quantitative <br> Arguments: <br> express <br> quantitative <br> information <br> symbolically, <br> graphically, and <br> in written or oral language. <br> Mathematical <br> Process: design <br> and follow a <br> multi- step <br> mathematical <br> process through <br> to a logical <br> conclusion and <br> critically evaluate <br> the <br> reasonableness <br> of <br> the result. | Retrieve and <br> Evaluate Information <br> Think <br> Critically, <br> Analyze, Solve <br> Problems <br> Develop Life Skills | Assessments may include, but are not limited to: <br> - Homework <br> - Quizzes <br> - Exams <br> - Projects |


| What students will learn in this class(Course Objectives) | Program <br> Learning <br> Outcomes | Interstate <br> Passport <br> Outcomes | Goals for <br> Student <br> Success | How the skills will be measured (Assessment) |
| :---: | :---: | :---: | :---: | :---: |
| Identify and construct inverse functions and their properties | Demonstrate proficiency in mathematical skills, concepts and logic. <br> Use <br> mathematical <br> methods to solve applied <br> problems and clearly <br> communicate problem <br> solutions or logical explanations. <br> Use <br> appropriate <br> technology to <br> solve math <br> problems <br> and/or to <br> improve <br> conceptual <br> understanding. | Computational Skills: <br> demonstrate proficiency with arithmetic and algebraic computational skills, and extend them, for example, to geometric and statistical computations. | Retrieve and Evaluate Information Think Critically, Analyze, Solve Problems See Issues from Multiple Perspectives | Assessments may include, but are not limited to: <br> - Homework <br> - Quizzes <br> - Exams <br> - Projects |


| What students will learn in this class(Course Objectives) | Program <br> Learning <br> Outcomes | Interstate <br> Passport <br> Outcomes | Goals for <br> Student <br> Success | How the skills will be measured (Assessment) |
| :---: | :---: | :---: | :---: | :---: |
| Define, explain, and apply exponential and logarithmic functions and their properties | Demonstrate proficiency in mathematical skills, concepts and logic. <br> Use mathematical methods to solve applied problems and clearly communicate problem solutions or logical explanations. <br> Use appropriate technology to solve math problems and/or to improve conceptual understanding. | Formulation of <br> Quantitative <br> Arguments: <br> recognize, <br> evaluate, and <br> use quantitative <br> information, <br> quantitative <br> reasoning and <br> technology to <br> support a <br> position or line of reasoning. <br> Quantitative <br> Models: create, <br> analyze and <br> apply <br> appropriate <br> quantitative <br> models to solve <br> quantitative <br> theoretical and <br> real-world <br> problems | Retrieve and <br> Evaluate <br> Information <br> Think <br> Critically, <br> Analyze, Solve <br> Problems <br> See Issues <br> from Multiple <br> Perspectives | Assessments may include, but are not limited to: <br> - Homework <br> - Quizzes <br> - Exams <br> - Projects |

## Course Policies

Late Work: All due dates are firm, final, and non-negotiable.

Attendance Policy: This course requires regular participation, but this is the students' responsibility. The instructor will assume that the students are mature enough to understand the consequences (such as poor performance on tests) of not participating on a regular basis. While the "attendance" of each individual will not affect her or his grade, no exceptions on homework, quizzes, or exams will be made.

Extra Credit: There will be no extra credit offered in this course.

## Methods of Evaluation:

Homework (15\% of the Final Grade)
$\rightarrow$ Homework will be assigned and evaluated regularly through the MyMathLab
$\rightarrow$ Students are required to show work on all homework problems in a homework notebook
$\rightarrow$ Problems not submitted on time will have a 50\% deduction from the problems that are not completed on time.

- Quizzes (15\% of the Final Grade)
$\rightarrow$ Quizzes will be administered weekly. The material covered will be similar to homework problems and example problems in class.
$\rightarrow$ You must submit a scanned copy or picture of your written work to Canvas immediately after the quiz is finished.
$\rightarrow$ Submit only .doc, .docx, or .pdf documents. All your work should be in one document.
$\rightarrow$ Your written work must have your name, course, and quiz number on the first page.
$\rightarrow$ Your written work must be neat with problems properly numbered.
$\rightarrow$ Show all your work in order to receive full credit or to be eligible for partial credit review.
$\rightarrow$ There will be a $50 \%$ deduction of your quiz score if your work is not submitted!
$\rightarrow$ Missed quizzes may only be made-up if the absence is due to a school-related event, illness, or emergency. It is the student's responsibility to arrange a make-up time BEFORE leaving for a school event or as soon as possible if the missed quiz is due to illness or an emergency.
$\rightarrow$ Graphing calculators are not allowed on quizzes, see the calculator suggested for this class below.
- Exams (70\% of the Final Grade)
$\rightarrow$ Three regular exams and one comprehensive final exam (Time Permitting) will be administered during the semester.
$\rightarrow$ The final exam will be administered on the last day of class (Time Permitting). Do not make plans to leave town before the final exam. Any student who has three or more final exams scheduled in one day is entitled to have one changed.
$\rightarrow$ In the event of documented medical emergencies or college approved/sponsored activities, the student must contact the instructor as soon as possible if she or he is unable to take the exam, and provide the instructor with the documented proof of the absence. Accommodations will be made for these students only. Otherwise, if an exam is missed, the student will receive a zero percent (0\%) on the exam.
$\rightarrow$ If a scheduled makeup is missed, earning full credit for the exam may not be possible.
$\rightarrow$ Students who must miss an exam due to a school-related function must make accommodations with the instructor at least ONE WEEK in advance of the missed exam or the student may not have the possibility to make up the exam.
$\rightarrow$ You must submit a scanned copy or picture of your written work to Canvas immediately after the test is finished.
$\rightarrow$ Submit only one single .pdf document. All your work should be in this one document. Your written work must have your name, course, and test number on the first page. Your written work must be neat with problems properly numbered and preferably in order.
$\rightarrow$ Show all your work to receive full credit or to be eligible for partial credit review.


## Grading Policy: College Policy and Procedure Policy 5240A

## Grading Scale:

$A=90-100 \%$
$B=80-89 \%$
$C=70-79 \%$
$D=60-69 \%$
$F=0-60 \%$

| Homework | $15 \%$ |
| :--- | :--- |
| Quizzes | $15 \%$ |
| Tests | $45 \%$ |
| Final Exam | $25 \%$ |

Rounding Policy: Grades will be rounded to the nearest whole number, i.e. $89.5 \%$ is rounded up to $90 \%$, but $89.4 \%$ is rounded down to $89 \%$.

## Changes to the Syllabus

The information in this syllabus is subject to change. Students will be notified of any changes.

## Major Units of Study

- Ch 1: Graphs, Functions, and Models (1.1-1.4)
- Ch 2: More on Functions (2.1-2.5)
- Ch 3: Quadratic Functions and Equations; Inequalities (3.1-3.3)
- Ch 4: Polynomial Functions and Rational Functions (4.1, 4.2, 4.5)
- Ch 5: Exponential Functions and Logarithmic Functions (5.1-5.6)
- Ch 9: Systems of Equations (9.1)


## Inclusivity Statement

Western Wyoming Community College is an Equal Opportunity Institution and as such, prohibits discrimination and harassment based on race, color, religion, gender identity, gender expression, veteran status or political belief in admission, employment, access to and treatment in College programs, classes, services and activities.

## Academic Integrity and Plagiarism Policy

According to the Merriam-Webster Online Dictionary, to "plagiarize" means:

- To steal and pass off (the ideas or words of another) as one's own
- To use (another's production) without crediting the source
- To commit literary theft
- To present as new and original an idea or product derived from an existing source

Plagiarism is explicitly not allowed and will result in the student receiving a zero on the assignment. Recurring instances of plagiarism can lead to receiving a final grade of "F" for the course or dismissal. Policy 6220D

## Title IX Duty to Report

Western faculty are committed to supporting students and upholding the College's nondiscrimination policy. Under Title IX, discrimination based upon sex and gender is prohibited. If you experience an incident of sex- or gender-based discrimination, we encourage you to report it. While you may talk to a faculty member, understand that as a "Responsible Employee" of the College, the faculty member MUST report information you share about the incident to the College. If you would like to speak with someone who may be able to afford you privacy or confidentiality, there are people who can meet with you. Faculty can help direct you or you may find info at the Office of Wellbeing and

Accessibility located on Western's Rock Springs Campus room 1227 or call 307-3811652.

## Incomplete Policy

Incomplete Policy_(College Policy and Procedure 5240A) :

The grade of "I" (Incomplete) may be given after the mid-point of a course when unexpected circumstances, such as illness or military service, make it impossible for a student who is passing the course with a "C" or better at the mid-point of the course to complete the remaining work by the end of the semester. The purpose of an Incomplete, therefore, is not to repeat the entire course but to complete no more than $50 \%$ of the work. It is the student's responsibility to initiate this process, but an Incomplete is assigned solely at the instructor's discretion. An Incomplete will automatically revert to an " $F$ " without action by the student during the following semester.

